

Title (en)

METHOD FOR THE ROBOT-AIDED WIRING OF ELECTRICAL COMPONENTS OF AN ELECTRICAL SWITCHGEAR ARRANGED ON A MOUNTING PLATE

Title (de)

VERFAHREN ZUR ROBOTERGESTÜTZTEN VERDRAHTUNG VON ELEKTRISCHEN KOMPONENTEN EINER AUF EINER MONTAGEPLATTE ANGEORDNETEN ELEKTRISCHEN SCHALTANLAGE

Title (fr)

PROCÉDÉ DE CÂBLAGE ASSISTÉ PAR ROBOT DE COMPOSANTS ÉLECTRIQUES D'UNE INSTALLATION DE DISTRIBUTION ÉLECTRIQUE MONTÉE SUR UNE PLAQUE DE MONTAGE

Publication

EP 3900131 A1 20211027 (DE)

Application

EP 19836458 A 20191127

Priority

- DE 102018133319 A 20181221
- DE 2019101017 W 20191127

Abstract (en)

[origin: WO2020125851A1] The invention relates to a method for the robot-aided wiring of electrical components of an electrical switchgear arranged on a mounting plate, which method has the steps of: - providing (100) a plan of a switchgear (2), which plan has at least location information relating to a plurality of electrical components (3) of the switchgear on a mounting plate (1) and wiring information relating to a plurality of electrical wirings (4) between two of the electrical components (3) in each case; - extracting (700) cable routing, including a cable source coordinate, a cable target coordinate and a wiring path between the cable source coordinate and the cable target coordinate, from the wiring information for at least one of the plurality of wirings (4); - generating (800) trajectory and/or vector points along the cable routing and parameterizing (900) the trajectory and/or vector points for the purpose of generating robot control; and - controlling (1100) a robot using the robot control.

IPC 8 full level

H02B 3/00 (2006.01); **H02B 1/20** (2006.01)

CPC (source: EP KR US)

B25J 9/1664 (2013.01 - US); **B25J 9/1671** (2013.01 - US); **B25J 9/1682** (2013.01 - US); **B25J 9/1687** (2013.01 - EP KR US); **B25J 13/08** (2013.01 - US); **H02B 1/202** (2013.01 - KR US); **H02B 3/00** (2013.01 - EP KR US); **H02G 1/1248** (2013.01 - KR); **G05B 2219/40519** (2013.01 - EP KR US); **G05B 2219/45097** (2013.01 - EP KR US); **H02B 1/202** (2013.01 - EP); **H02G 1/1248** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2020125851 A1 20200625; CN 113424383 A 20210921; CN 113424383 B 20230905; DE 102018133319 A1 20200625; EP 3900131 A1 20211027; EP 3900131 B1 20221228; KR 102609176 B1 20231205; KR 20210104832 A 20210825; PL 3900131 T3 20230327; US 12030193 B2 20240709; US 2022072713 A1 20220310

DOCDB simple family (application)

DE 2019101017 W 20191127; CN 201980091973 A 20191127; DE 102018133319 A 20181221; EP 19836458 A 20191127; KR 20217022516 A 20191127; PL 19836458 T 20191127; US 201917416640 A 20191127